

F651SX 超微粒鎢鋼塗層難削材用立銑刀

End Mills For Difficult To Cut Materials

Designed with two variable helix geometry and two unequal flutes.

Sharp cutting edge is good for cutting toughness materials.

Designed with high removal cutting geometry.

Good wear resistance and lubricating effect with Nano multilayer coating.

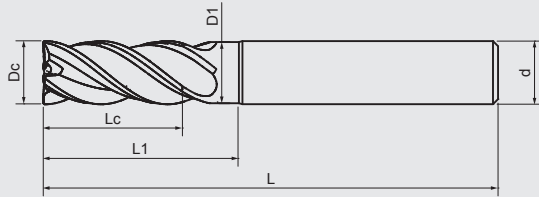
兩個不等螺旋角。

兩個不等分割刃。

刀口鋒利適用切削韌性材料。

高移除率刀型幾何設計。

採用奈米多層膜塗層具有優異的潤滑及耐磨性。



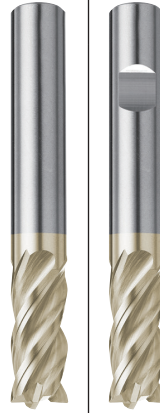
VHM
Carbide

AlTiXN+ZrN
SX



0.05-0.2
45°

Stainless
Titanium
Nickel



Sharp cutting edge is suitable for cutting stainless steel, titanium, nickel and high temp alloys... etc.

Application for roughing and finishing cutting in different materials.

刀口鋒利適用切削於不銹鋼、鈦合金、鎳基合金及高溫合金...等材料。

適用於粗、精切削應用於各種材料。

M
S

M
S

DIN 6527 Standard Length

Dc 0 -0.02	Lc mm	L mm	d h5	L1 mm	D1 mm	45° mm	F651SX HA	F651SX HB				
3	8	57	6	14	2.8	0.10	●	●				
4	11	57	6	16	3.8	0.10	●	●				
5	13	57	6	18	4.8	0.15	●	●				
6	13	57	6	20	5.8	0.15	●	●				
8	19	63	8	26	7.7	0.15	●	●				
10	22	72	10	31	9.7	0.20	●	●				
12	26	83	12	37	11.6	0.20	●	●				
16	32	92	16	43	15.5	0.20	●	●				
20	38	104	20	53	19.5	0.20	●	●				

切削條件

Cutting Conditions

F65ISX									
		cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)	cutting speed Vc (m/min)	feed per tooth fz(mm)
Stainless Steel Materials									
M	GR8-1 Ferritic、Martensitic	80	0.003xDc	90	0.004xDc	110	0.003xDc	130	0.003xDc
	GR8-2 Austenitic	70	0.003xDc	80	0.003xDc	90	0.003xDc	100	0.003xDc
	GR8-3 Austenitic-ferritic	40	0.002xDc	50	0.003xDc	60	0.002xDc	70	0.002xDc
	GR8-4 Austenitic-ferritic Heat-resistant	30	0.002xDc	40	0.003xDc	40	0.002xDc	50	0.002xDc
Cast Iron Materials									
	GRI5 Titanium	35	0.002xDc	40	0.002xDc	40	0.002xDc	45	0.002xDc
Nickel Materials									
S	GRI6-1 Nickel	30	0.002xDc	35	0.002xDc	35	0.002xDc	40	0.002xDc
	GRI6-2 cobalt-base alloys	30	0.002xDc	35	0.002xDc	35	0.002xDc	40	0.002xDc
	GRI6-3 Iron-based alloy	30	0.002xDc	35	0.002xDc	35	0.002xDc	40	0.002xDc
Heat-resistant Steel Materials									
	GRI7 Heat-resistant Steel	30	0.002xDc	35	0.002xDc	35	0.002xDc	40	0.002xDc

All cutting data serve for orientation only and should be adapted individually to the technical conditions on location

1. Please work with good rigidity / high precision facilities and collet chuck.
 2. Please choose proper cutting fluid.
 3. The cutting data is reference value only. Please adjust it according to your real working conditions.
 4. If RPM is lower the reference value, the Feed rate (fz) and RPM should be reduced by the same proportion.
 5. If vibration occurs during cutting, please reduce cutting parameter.
1. 請使用剛性好、精度高的設備和夾具。
 2. 請選擇適用於工件材料的切削液。
 3. 此切削條件表中的數值為切削條件的基準值，實際加工時，請考慮加工形狀、目的、使用機台等因素，對切削條件進行調整。
 4. 如果機台轉速低於表中所列數值，則進給速度應與轉速按同一比例降低。
 5. 切削加工時如果發生振顫，請降低切削條件。